1) is report is required by law (7 USC 2143). Failure to report according to the regulations can nesult in an order to cease and desist and to be subject to penalties as provided for in Section 215

> UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0014 CUSTOMER NUMBER: 108

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)

General Hospital Corporation Massachusetts General Hospital 32 Fruit Street Boston, MA 02114

Telephone: (617) -724-5151

3. REPORTING FACILITY ( List all locations where animals were housed or used in actual research, lesting, or experimentation, or held for these purposes. Attach additional sheets if necessary )

## FACILITY LOCATIONS (Sites) - See Alached Listing

Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use or pain-relieving drugs.	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals an for which appropriate enesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for whithe use of appropriate anesthetic, analgesic, or tranquitized drugs would have adversely affected the procedures, resor interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reask such drugs were not used must be attached to this report.)	F.  TOTAL NUMBER OF ANIMALS  ( COLUMNS C+D+E)
t. ⊃ogs	0	0	11	0	11
5. Cats	С	0	0	0	0
. Guinea Pigs	0	Ö	0	0	0
. damsters	0	0	20	0	20
Raboits	0	16	261	0	277
. Von-human Primates	0	0	189	0	189
Sheep	0	0	143	0	143
1 Pigs	921	13	468	0	1402
2 Other Farm Animals					
3 Other Animals					
Ferrets	0 _	0	15	.0	15

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anestetic, analgesic, and tranquilizing drugs, prior to, during, and following actual rest leaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator end ap Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report, in addition to identifying the IACUC-approved exceptions, this summary inc brief explanation of the exceptions, as well as the species and number of animals affected.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional Official)								
b6, b7c	NAME & TITLE	OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type o	Print) DATE SIGNED					
	solete.)	b6, b7c	na"w					

## APHIS Form 7023 Annual Report of Research Facility

## Animal Welfare Act Exceptions Approved by the IACUC For USDA-Covered Species

For the period October 1, 2007-September 30, 2008

Registration Number: 14-R-0014

Customer Number: 108

General Hospital Corporation d/b/a Massachusetts General Hospital 32 Fruit Street Boston, MA 02114

Exception: The MGH Subcommittee on Research Animal Care (SRAC) approved an exception to the "Guide for the Care and Use of Laboratory Animals" (the Guide; National Research Council, 1996) for the housing of swine weighing greater than 100 kg in the largest size cage available that is 25 square feet (applicable only to the MGH campus). The animals have not exceeded 100 kg when studies began, but some have grown to nearly 130 kg before the end of their time on study (usually for 2-4 weeks at excessive body weights). Due to the nature of the research and the requirement for indwelling catheters and parenteral feeding lines, allowing them greater floor area is not advised. There have been no adverse effects on the health, growth, behavior and activity of these animals as a result of being maintained in these 25-square foot pens.

Exception: The SRAC approved an exception to the *Guide* for providing feed on the cage floor for rodents, including those species covered by the Animal Welfare Act, under specific circumstances. The justifications for this exception are to provide access to feed for animals that may have had surgery or neurodegenerative conditions that limit their movement or otherwise may be debilitated during the course of a protocol and cannot easily reach feed normally provided in overhead hoppers. Hamsters and swine may be provided feed on cage or pen floors to allow those animals similarly easier access to feed.

Exception: The SRAC approved an exception to the Guide to allow washing microisolator rodent cage lids in CCM facilities up to every 6 months rather than the maximum interval of two weeks stated in the Guide. This is justified because lids are sterilized before use and remain free of bacteria and debris for over 6 months when used in accordance with proper microisolator technique.

Exception: The SRAC approved for baboons in intensive care to occasionally remain undisturbed for up to 21 consecutive calendar days, and so their cages are not exchanged for clean ones during that time. This lag in cage changing is because the chemical sedation required to transfer baboons to a clean cage may be too stressful while they

recover from transplant surgery and are highly immunosuppressed. The Guide and the Animal Welfare Act require an animal's primary enclosure to be cleaned or exchanged at least once every 14 days. Similarly, an exception to the Guide was approved for a study involving non-human primates that receive a radioisotope that requires 40 days to decay to safe levels, and the animals' cages will be spot cleaned in place by CCM staff instead of complete cage change which is an exception to the requirement that the animal's primary enclosure be cleaned or exchanged at least once every 14 days. Exception: The SRAC approved an exception for non-human primates enrolled in studies that require restricted fluid intake for performance of complex behavioral tasks. Animals that are not fluid controlled usually will not work or will only work for periods of time so brief as to not be useful for training and recording. For some studies, this may require access to drinking water only once per day. This is an exception to the Animal Welfare Act that states nonhuman primates must have free access to water at least twice each day for at least one hour at each time (9 CFR, Ch.1, Part3, Subpart D, §3.83). These animals are closely monitored by veterinary staff during the study to ensure animal welfare is maintained. Duration of restricted fluid intake is limited to the minimal time needed to accomplish the task, accompanied by mandatory 'vacation' periods that provide free access to oral fluids for at least two consecutive weeks at least every 6 months.

Exception: The SRAC approved an exception to alter room air changes per hour in all animal areas of the swine breeding facility in Grafton from a minimum of 10 room air changes per hour to 5 room air changes per hour during outside low temperature periods. This is because when the outside temperature drops below 30 degrees Fahrenheit it may be difficult to maintain inside temperatures of 68 +/- 6 degrees of Fahrenheit at 10 or more room air changes per hour. Additionally, an exception was approved for a 30-35 day cleaning schedule of primary enclosures for breeding swine in farrowing cages and piglets in nursery pens to avoid disturbing periparturient sows and their newborn litters.